## K C Chakrabarty: Productivity trends in Indian banking in the post reform period – experience, issues and future challenges

Special address by Dr K C Chakrabarty, Deputy Governor of the Reserve Bank of India, at the FIBAC 2013, organized by FICCI (Federation of Indian Chambers of Commerce & Industry) and IBA (Indian Banks' Association), Mumbai, 13 August 2013.

*   *   *

*Data used in the document in provisional and intended to capture the broad trends only. It may not tally with actual figures.*

Shri K.R. Kamath, Chairman, IBA and CMD, Punjab National Bank; Shri H.S.U. Kamath, CMD, Vijaya Bank; Smt. V.R. Iyer, CMD, Bank of India; Shri R.K. Dubey, CMD, Canara Bank; Shri M. Narendra, CMD, Indian Overseas Bank; Shri D. Sarkar, CMD Union Bank of India; other senior colleagues from the banking industry; delegates to the conference; members of the print and electronic media; ladies and gentlemen. It is, indeed, a great pleasure and privilege for me to address this august gathering today and I thank FICCI and the IBA for this opportunity. The conference, which is in its twelfth edition, has succeeded in bringing together the best minds in the banking industry and has grown into a platform which deliberates contemporary issues facing Indian banking. I am very glad to note the theme chosen for this year's event, "Consistency, Quality and Resilience: The Next Frontier for Productivity and Excellence". I strongly believe that productivity and efficiency in banking services would be the bulwark for all round economic development in India. Considering the challenges currently confronting the economy, there is little doubt that the time for the next big productivity push in Indian banking is now. I therefore, congratulate FICCI and IBA for their choice of theme for the conference and do hope that ideas emanating from the conference deliberations bear fruition in the coming days.

2. I am happy to note that BCG has brought out a study report on the theme of the conference, which, based on extensive field survey, has recommended several measures for attaining productivity excellence in Indian banking. I congratulate BCG for their effort and do hope that the banking industry gives serious thought to the study recommendations and takes them forward in right earnest.

3. During my address today, I would be highlighting the trends in productivity in Indian banking over the last two decades, including trends across bank groups. However, the thrust of my address would be on the fact that improvements in productivity and efficiency of banks has not had the desired beneficial impact on all segments of our economy and hence, there is a need for the entire paradigm of banking productivity and efficiency to be reoriented to be in alignment with our national priorities.

### Productivity and efficiency

4. Investopedia defines productivity as an economic measure of output per unit of input. The concept of productivity is more easily applied to industrial settings while it is more difficult to define and measure in the context of services sector, including the banking industry. We often have to rely upon proxies to gauge productivity of banks and there is no single measure that has been universally accepted as representing banking productivity.

5. It is common to see the terms "productivity" and "efficiency" being used interchangeably in literature. However, productivity is more a measure of performance of labour, which is one of the factors of production. Efficiency, on the other hand, is a much broader term which represents the performance of all factors of production. In case of banks, while productivity measures the performance of their staff, efficiency represents the combined performance of staff, capital and management. However, let me add that there are strong inter-linkages between the performance of the three factors of production: high productivity of staff will

result in efficient utilization of capital, while an efficient management function would result in superior performance by labour and capital. It would, therefore, be safe to conclude that when all the key inputs are optimally deployed, the outcome will be an "efficient" bank. Having said that, let me state upfront that I would also be using the terms "productivity" and "efficiency" concurrently in my address today.

## Productivity and efficiency of banks

6. Banks form the core of a nation's financial system, performing the vital function of financial intermediation through liquidity, maturity and risk transformation. Finance is the lifeline of any commercial activity and banks act as a link between the savers and the borrowers. The productivity and efficiency of banks, thus, critically impacts the productivity and efficiency of all economic activity and is a matter of concern for policy makers and economy watchers. There are two aspects to banking efficiency which I would like to highlight:

(i) ***Allocational Efficiency:*** Allocational efficiency focuses on ensuring that the precious financial resources are allotted to the most productive activities as per development needs of society. It seeks to ensure that the broad national priorities are furthered through the process of resource allocation and that the interests of the most vulnerable sections are protected.

(ii) ***Operational Efficiency:*** Operational Efficiency means banks seek to provide financial services in a safe, secure, speedy and cost effective manner. The goal should be to ensure that the transformation function generates least friction in terms of time and cost overlays.

7. The concepts of allocational and operational efficiencies have considerable inter-linkages and the challenge for banks is to ensure optimal performance on both fronts. However, as I would argue later in my address, the Indian banking system has not succeeded in balancing these two parameters, with the result that progress on one has been at the cost of the other.

8. Those who would recollect my address at FIBAC 2012 may remember that I had sought to deliberate on the concept of allocational efficiency through the Revised Priority Sector Guidelines, which had been issued a few months earlier. The theme for this year's event permits me to take my thoughts forward by focusing on the other element, viz. operational efficiency and on the interplay between the two.

## Importance of productivity in banking

9. As I mentioned earlier, banks perform the important function of financial intermediation and the efficiency of their operations has an important bearing on overall economic health of the country. Greater efficiency in banking operations ensures that the cost of financial intermediation is minimized. At a time when the global and Indian economy are facing challenges on multiple fronts, efficient financial intermediation would provide impetus to the process of economic recovery by channelizing funds to the most productive sectors at the lowest cost.

10. Improvement in productivity and efficiency, and the resultant decline in cost of providing financial services will help in furthering financial inclusion (FI). More importantly, it will help in converting the improved access to financial services into improved usage. This improved usage will make the FI activities commercially viable both for the banks and for the BCs and encourage them to scale up their FI initiatives, thereby helping in quickly bringing the remaining unbanked villages into the fold of the formal financial system. Hence, banking productivity and efficiency has a direct impact on improving financial access and financial usage.

11. The recent decline in economic growth has presented significant challenges to banks through rising impairment of assets, pressure on margins and volatility in non-interest income. In this demanding business environment, improved operational efficiency will help banks in standing up to the challenges and enable them to maintain their health and

profitability. I strongly believe that every time the financial system has been faced with a crisis, a resolute push towards improved productivity and efficiency has invariably aided it in seeing through the troubled times.

12. As banks form the core of the country's financial system, the health and profitability of banks will help in ensuring stability and resilience of the entire financial system. Thus, from a systemic stability perspective also, improved productivity and efficiency of the banking system is a definite positive.

## Productivity trends in Indian banking

13. The Indian banking industry has, over the years, taken significant strides in its quest for greater productivity. Analysis of data (based on various parameters) indicates that Indian banks, particularly the public sector banks, have shown significant progress on the productivity and efficiency front. The efficiency of banks has been analyzed based on cost based parameters and profitability linked parameters.

## Cost based parameters

Table 1 Operating Expenses Ratios (figures in %)

| All Banks | 1992 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating Exp to Avg. Assets | 2.60 | 2.82 | 3.00 | 3.01 | 2.88 | 2.84 | 2.35 | 2.32 | 2.12 | 1.87 | 1.86 | 1.75 |
| Operating Exp to Avg. Business | 2.09 | 2.27 | 2.51 | 2.51 | 2.39 | 2.34 | 1.93 | 1.85 | 1.59 | 1.39 | 1.36 | 1.26 |
| Cost Income Ratio | 55.58 | 72.46 | 63.41 | 61.00 | 64.30 | 63.38 | 48.36 | 49.56 | 50.13 | 44.68 | 45.23 | 45.02 |

14. As can be seen from the table above, all three ratios have seen a significant improvement during this period, indicating improved efficiency of the banking system. For instance, the Ratio of Operating Expenses to Average Assets has seen a decline from 2.60% to 1.75% during 1992–2013. A bank-group wise analysis indicates that Public Sector Banks (PSBs) have seen much greater progress as compared to new private banks and foreign banks (Tables in Annex). The Cost Income ratio across bank groups also indicates similar pattern, with the ratio seeing a significant decline over the period 1995–2013. The main drivers of this decline were the PSBs, which saw a perceptible decline in this ratio while new private banks and foreign banks, in fact, saw a rise in this ratio over the period under review.

15. An analysis of the CAGR of various expense parameters indicates that operating expenses grew at a CAGR of 14.65% between 1992 and 2013, whereas staff expenses grew at a CAGR of 13.63% during this period. PSBs had the lowest CAGR for operating expenses, staff expenses and other operating expenses (Table in Annex)

Table 2: Staff Expenses and Other Operating Expenses Ratios (figures in %)

| All Banks | 1992 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Staff Exp to Average Assets | 1.75 | 1.88 | 1.98 | 2.04 | 1.91 | 1.93 | 1.46 | 1.36 | 1.16 | 1.00 | 1.10 | 0.98 |
| Staff Exp to Average Business | 1.40 | 1.52 | 1.66 | 1.70 | 1.58 | 1.59 | 1.20 | 1.09 | 0.86 | 0.75 | 0.80 | 0.70 |
| Staff Expenses per employee (in ₹ 000s) | 65 | 74 | 98 | 134 | 173 | 268 | 280 | 342 | 408 | 511 | 727 | 799 |
| Other Operating Exp to Average Assets | 0.85 | 0.94 | 1.02 | 0.97 | 0.98 | 0.91 | 0.89 | 0.95 | 0.97 | 0.87 | 0.76 | 0.77 |
| Other Operating Exp to Average Business | 0.68 | 0.76 | 0.85 | 0.81 | 0.81 | 0.75 | 0.73 | 0.76 | 0.72 | 0.65 | 0.56 | 0.56 |

16. As indicated by Table 2 above, banking productivity in terms of staff costs has seen a considerable improvement during 1992–2013. Interestingly, there has been a significant convergence of these ratios across various bank groups (Tables in Annex). While the ratios

have increased over this period in case of foreign banks and new private banks, the ratios have seen a considerable decline in case of PSBs.

### Profitability/turnover based parameters

Table 3 Selected Ratios (figs in %)

| Year | 1992 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Net Interest Margin | 3.30 | 2.65 | 3.26 | 3.40 | 3.03 | 3.06 | 2.91 | 3.08 | 2.86 | 2.62 | 2.91 | 2.79 |
| Gross Income to Avg. Assets | 4.68 | 3.89 | 4.72 | 4.93 | 4.48 | 4.48 | 4.86 | 4.67 | 4.24 | 4.19 | 4.12 | 3.89 |
| Operating Profit to Average Assets | 2.08 | 1.07 | 1.73 | 1.92 | 1.60 | 1.64 | 2.51 | 2.36 | 2.11 | 2.32 | 2.26 | 2.14 |
| Net Profit to Average Assets | 0.37 | 1.14 | 0.47 | 0.70 | 0.53 | 0.54 | 1.05 | 0.97 | 1.00 | 1.10 | 1.06 | 1.02 |

17. The NIMs of banks saw a decline from 3.30% in 1992 to 2.79% in 2013. Importantly, the NIMs of Nationalized banks were considerably lower than that of other bank groups and stood at 2.39% in 2013, while foreign banks and new private banks had NIMs of 3.89% and 3.32% respectively (Tables in Annex). The higher NIMs indicated greater intermediation spread charged by banks and could be viewed as a cost. Banks need to develop the capability to viably carry out their operations with lower NIMs as this would be essential in providing low cost services to the excluded groups.

18. It is evident that improved productivity and efficiency has positively impacted the profitability levels of the banking system. However, as I would be alluding to later, the same has been due to structural changes in banks' balance sheet. The higher profitability parameters also indicate that the benefits of improved efficiency have not been passed on to the customers and have, instead, been retained by banks for higher profits and provisioning.

19. Thus, the key observations from the analysis of productivity trends in Indian banking are:

- On both cost and profitability based parameters, the productivity and efficiency of banks has seen a definite improvement over the last two decades.
- At a bank group level, PSBs have performed better than new private banks and foreign banks on various benchmarks.
- However, the progress has not been constant and continuous over this period. There have been phases of rapid and slow growths.

### Four phases of productivity growth

20. In order to better understand the productivity trends in the banking system, the post reform time line in India may be divided into distinct phases based on various internal and external developments which impacted the banking sector.

- ***Phase 1 (Pre-1995):*** This phase represents the period immediately after the economic reforms. Besides the challenges posed by the changes in business environment due to the reforms, banks also had to adjust to changes in regulatory norms.
- ***Phase 2 (1995–2001):*** This was a period of stabilization post reforms and was characterized by developments like computerization, formulation of strategies for technology implementation, challenges of NPAs and banks approaching markets for capital.
- ***Phase 3 (2001–2007):*** This was the growth phase when the impact of reforms was fully felt. This period was characterized by technology upgradation by banks, benefit of global liquidity and a period of growth. This was also the phase of build-up of risks due to the irrational exuberance exhibited by market players.

- ***Phase 4 (2007–2013):*** This last phase is dominated by the global financial crisis and post crisis pains. The risks building up in the previous phase crystallized during this period. The period is also characterized by reforms fatigue, lack of banking penetration, absence of internal reforms and ineffective structure, systems and people.

21. In view of the considerable inter-year variations in various productivity indicators, analysis of the same has been done over the above four phases in order to identify trends. For this purpose, averages of various parameters over the relevant period have been considered.

**Table 4**

| Operating Expenses Ratios (%) | Pre 1995 | 1995-2001 | 2001-2007 | 2007-2013 |
|---|---|---|---|---|
| Avg. Operating Expenses to Avg. Total Assets | 2.8 | 2.9 | 2.3 | 1.8 |
| Avg. Operating Expenses to Avg. Business | 2.3 | 2.4 | 1.8 | 1.3 |
| Avg. Operating Expenses to Avg. Net Income | 64.6 | 62.0 | 50.8 | 45.6 |
| **Staff Expenses Ratios (%)** | | | | |
| Avg. Staff Expenses to Avg. Total Assets | 1.9 | 1.9 | 1.4 | 1.0 |
| Avg. Staff Expenses to Avg. Business | 1.5 | 1.6 | 1.1 | 0.7 |
| Avg. Staff Expenses to Avg. Net Income | 42.7 | 41.8 | 30.3 | 25.3 |
| Avg. Staff Expenses to Avg. No. of Employees (₹ 000) | 79.8 | 161.3 | 321.9 | 612.3 |
| **Other Operating Expenses Ratios (%)** | | | | |
| Avg. Other Operating Expenses to Avg. Total Assets | 1.0 | 0.9 | 0.9 | 0.8 |
| Avg. Other Operating Expenses to Avg. Business | 0.8 | 0.8 | 0.7 | 0.6 |
| Avg. Other Operating Expenses to Avg. Net Income | 21.9 | 20.2 | 20.5 | 20.2 |

The key observations that emerge from the analysis of expenses across the four phases are:

- There is definite evidence of productivity and efficiency gains in Indian banking. This productivity gain has led to strengthening of balance sheets of banks.
- The gap between PSBs and other bank groups on various productivity parameters has considerably narrowed. Though there were initial concerns that PSBs will lose out to competition from the new private banks and foreign banks, it is commendable that PSBs have responded well to the challenge and have succeeded in raising their efficiency levels. In case of new private banks, expense ratios remain high as they are in an expansionary phase.
- The pace of productivity gains has varied with the greatest progress being seen in Phase 3 (2001–2007), while lower gains were witnessed in the initial two phases. It is observed that the productivity gains started tapering off in the fourth phase.
- Within operating expenses, it is observed that staff expenses have improved faster than other operating expenses. Currently, other operating expenses of PSBs continue to remain considerably lower than new private banks and foreign banks. This is largely due to the fact that they have not paid adequate attention to the physical infrastructure and the ambience at branches. However, this ratio is also expected to converge in the future.
- Interestingly, in phase 4, PSBs have emerged as the highest per employee staff expenses among Indian bank groups. This clearly indicates that they have lost the staff cost advantage of the past. However, they have saved on aggregate staff expenses by curtailing staff deployment with the use of technology.

## Global comparison

22. While we have made some progress on the productivity front, it is important to benchmark the Indian banking system against global productivity standards in order to get a better understanding of where we stand.

**Table 5** **Global Comparison** (figs. In %)

| Ratios | Year | India | China | Indonesia | Malaysia | Korea | UK | Canada |
|---|---|---|---|---|---|---|---|---|
| Ratio of Oper Exp. To Total Assets | 2003 | 2.24 | 1.63 | 3.39 | 2.07 | 3.74 | 1.34 | 3.23 |
| | 2006 | 2.13 | 1.43 | 3.97 | 1.91 | 2.07 | 1.39 | 2.57 |
| | 2009 | 1.71 | 0.92 | 2.85 | 1.27 | 1.20 | 0.86 | 2.09 |
| | 2012 | 1.65 | 0.80 | 3.29 | 1.27 | 1.05 | 1.03 | 1.74 |
| Net Interest Margin | 2003 | 2.77 | 2.33 | 4.90 | 2.67 | 2.84 | 0.86 | 2.36 |
| | 2006 | 2.81 | 2.30 | 5.90 | 2.15 | 2.72 | 1.06 | 1.76 |
| | 2009 | 2.39 | 2.27 | 5.60 | 3.11 | 2.17 | 0.94 | 1.82 |
| | 2012 | 2.70 | 2.75 | 5.30 | 2.38 | 2.40 | 1.02 | 1.85 |
| Ratio of Net Profit to Total Assets | 2003 | 1.00 | 0.49 | 1.66 | 1.10 | 0.02 | 0.37 | 0.75 |
| | 2006 | 0.88 | 0.62 | 1.56 | 0.99 | 0.98 | 0.53 | 0.95 |
| | 2009 | 1.01 | 0.86 | 2.60 | 0.40 | 0.40 | 0.06 | 0.57 |
| | 2012 | 0.98 | 1.28 | 2.60 | 1.80 | 0.70 | 0.09 | 0.86 |

While there has been a tangible improvement in our relative productivity levels on various parameters such as Operating Expenses Ratio, we still lag behind several of our peers from Asia and the developed world. For instance, in case of Ratio of Operating Cost to Assets, China (0.80%), Malaysia (1.27%) and Korea (1.05%) have much lower ratios as compared to the Indian position of 1.65%. Considering the fact that we are pursuing the mission of extending access to affordable banking services to the unbanked poor, we need to target a level which is at par, if not better than many of these countries.

23. Our Net Interest Margin at 2.70% is also higher than that observed in many other countries. While this would have helped in improved profitability of our banks, the higher margins indicate an extent of inefficiency, which is being passed on to the ultimate customers. On the Ratio of Net Profit to Assets, Indian banks are better than many other jurisdictions. Considering the fact that our Operating expenses ratio are higher than many countries, the ratio suggests that our banks have been passing on the cost of their operational inefficiencies to their customers and are, thus, able to record greater profits at the cost of their customers.

## What has happened to allocational efficiency?

24. As was observed from the analysis presented previously, the Indian banking system has seen a perceptible improvement in its efficiency levels over the last two decades. However, the question that I would like to pose here today is that has the improved operational efficiency resulted in attainment of desired outcomes for all sections of our population? I would argue that the improved operational efficiency has not facilitated greater allocational efficiency, but has, instead, been at the cost of allocational efficiency. Let me present some data to buttress my argument:

**Table 6: Population Group-wise Number of Branches of SCBs**

| Year | Rural | Semi-urban | Urban | Metropolitan | Total | Rural Branches as % to Total Branches | No. of Banked Centres |
|---|---|---|---|---|---|---|---|
| **1994** | 35329 | 11890 | 8745 | 5839 | 61803 | 57.16 | 37542 |
| **2000** | 32734 | 14407 | 10052 | 8219 | 65412 | 50.04 | 35885 |
| **2006** | 30119 | 15790 | 12159 | 11799 | 69867 | 43.11 | 34577 |
| **2010** | 32488 | 20869 | 16692 | 15451 | 85500 | 38.00 | 34801 |
| **2013** | 39073 | 28180 | 19695 | 18130 | 105078 | 37.18 | 38927 |

The proportion of rural branches to total branches of scheduled commercial banks (SCBs) has seen a sharp decline from 57.16% in 1994 to 37.18% in 2013. In fact, the number of rural branches of SCBs saw a continuous decline between 1994–2006. This indicated a complete neglect of the requirements of rural areas by banks during this period. It was only after a determined regulatory push towards financial inclusion that the number of rural branches saw a perceptible rise post 2009. The failure of banks to improve their allocational efficiency is evident from the fact that resources, in terms of banking presence, was not allotted to the most underbanked segments i.e. the rural areas. This was despite the fact that improving operational efficiency and access to technology over this period had enhanced the capability of banks to better serve rural habitations. Yet it appears that banks chose to ignore the need for allocational efficiency.

**Table 7 Population Group-wise break-up of Deposit and Credit of SCBs**

(Amt. in ₹ bn; no. of accts in 000s)

| Credit | Rural | | Semi-urban | | Urban | | Metropolitan | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Accts | Amount Osg | No. of Accts | Amount Osg | No. of Accts | Amount Osg | No. of Accts | Amount Osg | No. of Accts | Amount Osg |
| **1994** | 32310 | 308.63 | 16114 | 264.86 | 7349 | 361.75 | 3878 | 823.67 | 59651 | 1758.91 |
| **2000** | 25080 | 594.26 | 14865 | 647.90 | 7795 | 795.90 | 6631 | 2562.74 | 54371 | 4600.81 |
| **2006** | 29054 | 1994.23 | 21475 | 1747.94 | 12919 | 2763.65 | 21988 | 8632.59 | 85435 | 15138.42 |
| **2010** | 37074 | 3851.50 | 27047 | 3678.59 | 16242 | 5936.15 | 38285 | 19985.45 | 118648 | 33451.69 |
| **2012** | 41749 | 4422.12 | 31292 | 5282.89 | 17740 | 8548.68 | 40099 | 29778.98 | 130881 | 48032.67 |
| **Deposit** | | | | | | | | | | |
| **1994** | 121299 | 493.31 | 108502 | 630.35 | 93032 | 742.49 | 74046 | 1373.61 | 396879 | 3239.77 |
| **2000** | 125852 | 1205.39 | 114109 | 1619.72 | 89831 | 1889.63 | 83023 | 3499.45 | 412815 | 8214.20 |
| **2006** | 139570 | 2260.61 | 121664 | 3022.13 | 106172 | 4308.13 | 117692 | 11320.87 | 485098 | 20911.74 |
| **2010** | 224155 | 4203.38 | 189457 | 6140.47 | 152323 | 9449.92 | 168934 | 25816.52 | 734869 | 45610.29 |
| **2012** | 283072 | 5731.86 | 239951 | 8425.45 | 180626 | 12725.92 | 199551 | 33899.21 | 903200 | 60782.43 |

The above data indicates that the number of credit accounts in rural areas increased at a CAGR of 1.4% between 1994–2012, while the number of credit accounts in Metro areas recorded a CAGR of 13.86%. The proportion of credit flowing to rural areas also declined from 18% to 8%, while the proportion of deposits being sourced from rural areas declined from 15.1% to 9.4% during this period. Both the above metrics highlight the declining focus of banks on rural business and greater emphasis on business in metro areas.

**Table 8: Sectoral Deployment of Bank Credit**

(₹. billion)

| Year | Agri + SSI | Agri+SSI to total (%) | Medium + Large Industries | Med+Large Ind to Total (%) | Total Non Food Credit |
|---|---|---|---|---|---|
| **1994** | 438.25 | 30.03 | 578.65 | 39.65 | 1459.50 |
| **2000** | 971.95 | 25.91 | 1473.19 | 39.27 | 3751.27 |
| **2006** | 2651.84 | 18.88 | 4592.32 | 32.69 | 14048.40 |
| **2010** | 6225.34 | 20.48 | 11050.51 | 36.35 | 30400.07 |
| **2013** | 8742.62 | 17.95 | 19458.31 | 39.96 | 48695.63 |

The proportion of bank credit going to agriculture and SSI sectors has seen a steady decline from 30.03% in 1994 to 17.95% in 2013. This was despite the fact that these sectors have been receiving special attention from policy makers for some time now. As compared to this, the proportion of credit to medium and large industries has marginally increased from its levels in 1994, despite their contribution to GDP declining significantly over the years. This again highlights inadequate allocational efficiency among banks and their preference for catering to the needs of larger borrowers instead of smaller ones.

**Table 9 Concentration of Deposit and Credit in top 10 cities**

| as % of total | 2000 | | 2006 | | 2010 | | 2012 | |
|---|---|---|---|---|---|---|---|---|
| | Top 10 | Top 100 | Top 10 | Top 100 | Top 10 | Top 100 | Top 10 | Top 100 |
| **Deposits** | 39.42 | 59.00 | 47.97 | 66.95 | 50.39 | 69.40 | 49.31 | 69.11 |
| **Credit** | 58.31 | 74.72 | 60.51 | 76.47 | 61.46 | 78.00 | 60.29 | 78.26 |

Another measure of inadequate allocational efficiency among banks is the concentration of deposit/ credit indicated by the proportion held by top 10/100 cities as compared to total deposit/ credit. Based on this measure, there has not been any improvement in concentration of credit, which has remained largely unchanged over this period at around 60%, while concentration of deposits saw a considerable deterioration from 39% to 49%. The concentration indicated by the proportion of credit/ deposit to top 100 cities has also been steadily increasing over this period. This clearly indicates that smaller towns/ cities and rural areas were being deprived of credit/ deposit services by banks, adversely impacting economic growth opportunities available to them.

**Table 10: Occupation-wise distribution of Deposits**

(accts. in mn. and amt in ₹ bn.)

| Year | Individuals | | Others | | Total | | Individual as % of total | |
|---|---|---|---|---|---|---|---|---|
| | No. of accounts | Amount | No. of accounts | Amount | No. of accounts | Amount | No. of accounts | Amount |
| **1997** | 380.93 | 3875.84 | 15.65 | 1129.73 | 396.58 | 5005.56 | 96.05 | 77.43 |
| **2000** | 396.32 | 6173.70 | 16.50 | 2040.50 | 412.82 | 8214.20 | 96.00 | 75.16 |
| **2006** | 453.24 | 12313.10 | 31.86 | 8598.64 | 485.10 | 20911.74 | 93.43 | 58.88 |
| **2010** | 640.55 | 23560.36 | 94.32 | 220499.31 | 734.87 | 45610.29 | 87.10 | 51.60 |
| **2012** | 773.25 | 30782.60 | 129.95 | 29999.84 | 903.20 | 60782.43 | 85.61 | 50.64 |

The above occupation-wise analysis of deposits indicates that the percentage of deposit accounts held by individuals declined from 96% to 86% between 1997 and 2012. During this period, the proportionate amount of deposits held by individuals saw a steep decline from 77% to 51%. The declining share of individuals in deposits, both in terms of number and amount reinforces the fact that banks have been losing their focus on smaller customers and are increasingly moving towards servicing bigger clients.

**Table 11: Outstanding Credit of SCBs according to size of credit**

(Amt. osg in ₹ bn.; no. of accts in 000s)

| Year | Credit range in ₹ mn | upto 0.025 | 0.025 - 0.2 | 0.2 - 1.0 | 1.0 - 10.0 | 10.0 - 100.0 | 100.0 - 1000 | > 1000 | Total |
|---|---|---|---|---|---|---|---|---|---|
| 1994 | No. of accounts | 55810 (93.6) | 3283 | 423 | 113 | 20 | 1 | | 59651 |
| | Amt. Osg. | 322 (18.3) | 215 | 151 | 291 | 422 | 357 | | 1759 |
| 2000 | No. of accounts | 39276 (72.2) | 13580 | 1229 | 236 | 44 | 5 | 0 | 54370 |
| | Amt. Osg. | 364 (7.9) | 663 | 431 | 592 | 1061 | 949 | 539178 | 4600 |
| 2006 | No. of accounts | 38419 (45.0) | 38703 | 7183 | 1018 | 93 | 17 | 2 | 85435 |
| | Amt. Osg. | 452 (3.0) | 2033 | 2438 | 1971 | 2219 | 3475 | 2555922 | 15138 |
| 2010 | No. of accounts | 45179809 (38) | 57452043 | 13620506 | 2172069 | 179 | 39867 | 4804 | 118647882 |
| | Amt. Osg. | 436 (1.3) | 3171 | 4196 | 3992 | 4270 | 8889 | 8497362 | 33452 |
| 2012 | No. of accounts | 44047 (33.7) | 65064 | 18505 | 2961 | 238 | 58 | 9 | 130881 |
| | Amt. Osg. | 762 (1.6) | 3804 | 5652 | 5567 | 5448 | 11760 | 15038017 | 48033 |

* figures in parenthesis indicates percentage to total

Over the period 1994–2012, the number of very small credit accounts (limit upto ₹25000) saw a decline from around 55 million to 44 million despite the total number of credit accounts increasing by 119.4% over this period. The outstanding credit in these accounts as a proportion of total credit also declined from 18.3% to a mere 1.6%. Similarly, proportion of amount outstanding in small loans upto ₹0.2 million to total loans also declined from 30.5% to 9.5% during this period. The decline in smaller loan accounts, which often cater to the needs of the poor and marginalized sections of the society, again highlights the fact that banks have largely focused on catering to the needs of the bigger borrowers, which is against the principles of allocational efficiency. Predictably, the proportion of amount outstanding in high value loans (limit > ₹1000 mn) increased from 10% to 31% during this period.

25. A similar analysis in case of term deposit accounts reveals that the proportion of accounts with deposit less than ₹0.1 mn declined from 93.6% to 73.7% between 2002–2012. Importantly, the proportion of amount involved in such deposit accounts saw a sizeable decline from 46.8% to 10.9% during this decade. Based on the above trends in credit and deposit accounts, it is fair to conclude that banking in India has been increasingly oriented towards wholesale business. It appears to be losing its focus on retail and small value business. Here, I would like to remind our bankers that one of the lessons from the global financial crisis was that small value and retail business proved to be a source of stability and that banks focusing heavily on wholesale business were the most severely impacted in the crisis.

### What has not happened?

26. From the above data on various parameters, it is apparent that improving efficiencies in the Indian banking system have not had the desired beneficial impact on all segments of the population. This clearly implies that allocational efficiency has not kept pace with operational efficiency and, in fact, I may say that operational efficiency has been achieved at the cost of allocational efficiency. The gains from improving operational efficiency have not reached the customers, particularly the small customers or the poor and marginalized groups. In terms of geographical spread, these gains have not reached the rural areas and have largely

remained restricted to the metropolitan areas and larger cities. It is regrettable to note that despite the improvements made in operational efficiency, the problems of disparities in Indian banking and low penetration continue unabated.

27. While it was expected that greater competition and adoption of new technology would result in all round efficiency improvement in the banking system, it is again apparent that whatever limited competition that the banks have been exposed to and the technological progress has not resulted in bringing down the costs of providing banking services. I would like to pose the question that is a financial system with high operational efficiency but low allocational efficiency sustainable in the long run?

### Why has it not happened?

28. There are several reasons that can be attributed to this trend of declining allocational efficiency against improving operational efficiency. Let me list a few:

- The basic reason for the declining allocational efficiency is the lack of banking penetration in the country. This has resulted in the denial of basic banking services such as provision of savings and credit facilities to large segments of our population.
- As was seen from the data analysis also, banks seem to be increasingly focusing on wholesale business and have reduced their emphasis on individuals and segments such as agriculture and small industries. This trend has adversely impacted allocational efficiency as the same demands that the needs of the smaller customers be prioritized while allocating banking resources.
- While new technology has been adopted by banks in India, including migration to CBS, the beneficial impact of technological progress on the productivity of banks is still low when compared with global standards. This can largely be attributed to the fact that banks have not succeeded in leveraging technology to create products, business models and delivery channels that maximize productivity and efficiency.
- Most importantly, technological progress has not been accompanied by internal reforms in banks. Banks have not attempted to carry out comprehensive Business Process and Structure Reengineering to ensure that internal processes are realigned by leveraging technology with the goal of weeding out redundant processes and simplifying/ automating others.

### What have we done?

29. Ensuring greater levels of allocational efficiency in the economy has been one of the important priorities for policy makers and regulators. In fact, it is difficult to envisage the long term sustenance of a social or financial system where large scale disparities and inequalities exist. Hence, allocational efficiency, focusing on the needs and expectations of the excluded groups, has been receiving the attention of the Government and Reserve Bank. I would like to highlight some of the steps taken to ensure greater allocational efficiency in banking operations:

(i) Prescription of priority sector norms requiring banks to lend a certain part of their credit to sectors of the economy which, in the absence of these norms, would not receive adequate credit. With the revision in the priority sector norms in 2012, the same have been rationalized and larger foreign banks have also been mandated to be at par with Indian banks on priority sector lending, in a phased manner.

(ii) Pricing norms for the priority sector business have been freed and banks are permitted to fix interest rates on their own. This will help banks to carry out FI initiatives in a viable and self sustaining manner, which will facilitate its scaling up. We, however, do expect that the pricing would be non-discriminatory and would not be exploitative.

(iii) There has been a policy shift with emphasis being on greater branch expansion in rural areas. This is in recognition of the trend of declining rural branches and the importance of brick and mortar structures in improving allocational efficiency through FI. Accordingly, domestic SCBs have been mandated to allocate at least 25 per cent of the total number of branches to be opened during a year in unbanked rural centres, with the incentive of frontloading over the Financial Inclusion Plan (FIP) period.

(iv) Banks have been permitted to adopt Business Correspondents (BC) based delivery models to effectively cover the last mile. A host of institutions have been permitted to become BCs.

(v) A bank-led structured and planned push towards improving access and usage of the formal financial system by the unbanked masses has been made by leveraging on technology. Some of the FI initiatives taken in India include:

- Banks have been advised to prepare Board approved FIPs. First phase of FIP for the period 2010–2013 has been completed. Banks are now preparing the second phase of FIPs for the period 2013–2016.
- To address the issue of uneven spread of Bank branches, domestic SCBs have been given the freedom to open branches in centres with population of less than 100,000 subject to reporting to RBI.
- A high level Financial Inclusion Advisory Committee (FIAC) has been set up to provide strategic direction to FI initiatives across various stakeholders.
- In order to ensure operational efficiency and close monitoring of BC operations, banks have been advised to open intermediate brick and mortar structures to provide support to about 8–10 BC units at a reasonable distance of 3–4 kilometers.
- An integrated approach has been adopted for achieving FI through financial literacy. Various measures have been taken for the spread of financial literacy. A National Strategy for Financial Education has been finalized. Curriculum setting bodies are being involved for disseminating financial literacy in schools.

**What should happen?**

30. The way forward for banks on the path towards greater productivity and efficiency has to be two pronged. On the one hand, banks need to focus on further improvement in operational efficiency so that they are at par with their global peers. Concomitantly, banks also need to concentrate on improving allocational efficiency so that the benefits of improved operational efficiency are enjoyed by all. The key challenge will be to ensure that the two goals are synergized and allotted equal priority.

31. There are several other measures that Indian banks need to initiate in order to establish the balance between allocational efficiency and operational efficiency:

- Banks need to initiate internal reforms in order to ensure that their systems and processes are in a position to leverage technology to maximize productivity and efficiency gains. For this purpose, banks need to look at large scale Business Process and Structure Reengineering.
- Transaction costs need to be reduced by fully leveraging technology. This would include creation of new cost effective products, business models and delivery channels.
- Banks need to implement robust information systems and IT architecture and should harness the power of the IT systems for business development. Besides, a strong IT system will also aid in adoption of better risk management practices.

- Productivity improvement should benefit people at the bottom of the pyramid through improved access to financial services and lower cost of financial access. Every individual should have the opportunity to improve his/her financial position by leveraging access to the financial system. Banks have to facilitate this.
- Banks have to reverse the tendency of focusing on wholesale business and should ensure that agriculture, retail and SME business receive adequate attention. This is important not just for improving financial access for the smaller and marginalized groups, but also as a source of stability for banks.
- Banks should strive to improve their pricing ability, both for liability and asset products, with the objective of ensuring that the pricing framework is transparent, non-discriminatory and non-exploitative. The basic principle of pricing should be that the poor and the vulnerable should not be subsidizing the provision of banking services to the rich. Besides, an effective pricing framework can assist in building up balance sheet strength by encouraging good business and shedding bad business. However, for all this, banks need to develop the ability to identify risks and to build them into their pricing frameworks.
- In order to improve productivity and efficiency, banks need to be given more flexibility in operational matters, particularly in manpower practices. In fact, I strongly believe that HR practices at banks, particularly PSBs, need to undergo significant change in areas such as manpower planning, job description, performance appraisal, promotion and placement policies, performance based compensation practices, etc. Attaining greater productivity and efficiency requires not just the right technology, systems and processes, but also the manpower with the right skills and attitude, demonstrating the necessary flexibility and adaptability to be able to keep pace with the changing times. Greater emphasis has also to be laid on productivity in terms of per branch and per employee performance.
- Lastly, but most importantly, there is an urgent need for improved governance and greater accountability across all levels of management and administration. The change in corporate culture and the move towards true productivity and efficiency needs to be led by managements in their respective organizations. The pace and direction of these changes will be determined by the passion demonstrated by the management in pursuing this change.

### Banks have a great opportunity

32. The theme of the conference alludes to the paradigms of the Next Frontier of Productivity Excellence. To me, there are three major ingredients that contribute to productivity excellence, viz. Technology, Processes and People. I believe that significant opportunities lie ahead for our banks to leverage on these three components to attain true banking productivity and efficiency i.e. both operational and allocational. On the technology front, our banks have already implemented certain basic technology and are all on CBS. They are, of late, also making efforts to incorporate new technology mediums in their delivery channels. On the technology front, banks have the opportunity to perfect their technology based delivery models so as to significantly reduce costs and improve penetration of banking services.

33. On the Processes front, as I had mentioned earlier, the opportunity for banks is to carry out large scale Business Processes and Structure Reengineering in order to reap the full benefits of technology. Here, I would emphasize the need for changing Transactional Processes, Business Delivery Models and use of Customer Relationship Management (CRM) tools to bolster efforts towards productivity and efficiency.

34. On the People front, the opportunity lies in the form of large scale retirement of bank employees that is to happen in this decade. The consequent change in manpower profile

provides a unique opportunity for banks to Right-size and Right-skill their organizations in line with the demands of fostering greater productivity and efficiency.

## Conclusion

35. The Indian banking system has seen important productivity improvements over the last two decades with the PSBs, in particular, bridging the gap with new private banks and foreign banks. However, the pace of progress has declined, largely due to lack of desired impetus. We continue to lag behind several other countries on various productivity parameters. Our banks have to strive towards closing this gap.

36. Banks' gains in operational efficiency have, however, come at the cost of their allocational efficiency. The improved operational efficiency has been a result of technological progress and structural changes in balance sheet towards more wholesale business. The operational efficiency gains, though profitable for the banks, have not had the desired beneficial impact on the society as a whole, particularly the rural areas, individuals and small businesses. I would say that the vulnerability of the banking system has increased on account of the imbalances arising from growth in operational efficiency without commensurate rise in allocational efficiency. Let me add that both Reserve Bank of India and Government of India have already initiated several corrective measures to reverse this trend by actively promoting the programme of financial inclusion. The correction process needs to be expedited further with greater zeal and vigor.

37. Banks have to ensure that they attain greater allocational efficiency by extending access to financial services to the unbanked masses and providing the excluded poor the opportunity to leverage the financial system to improve their economic condition. True productivity of the banking system can be judged not just by the positive impact on banks' own financials but by the impact it has on the lives of ordinary citizens. I hope the Indian banking system rises up to the challenge of attaining productivity and efficiency in its true sense and thereby contributes to the economic growth and prosperity of the nation.

38. I once again thank FICCI and IBA for inviting me to FIBAC 2013 and providing me the opportunity to share my thoughts on this important subject. I observe that several of the issues raised by me here also find resonance in the report presented by BCG today and that they will be deliberated over the two days of the conference.

I wish the conference all success. Thank you.

## Annex*

**Table 1: Bank group-wise trends in Ratio of Operating Expenses to Average Total Assets**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 2.60 | 2.61 | 2.97 | | 2.26 |
| 1993 | 2.82 | 2.79 | 3.01 | | 3.01 |
| 1994 | 2.80 | 2.81 | 2.80 | | 2.74 |
| 1995 | 3.00 | 3.04 | 2.71 | 0.64 | 2.90 |
| 1996 | 3.16 | 3.20 | 2.81 | 2.15 | 3.11 |
| 1997 | 3.01 | 3.02 | 2.71 | 2.56 | 3.25 |
| 1998 | 2.85 | 2.87 | 2.53 | 2.22 | 3.19 |
| 1999 | 2.88 | 2.88 | 2.41 | 2.13 | 3.64 |
| 2000 | 2.68 | 2.70 | 2.32 | 1.80 | 3.25 |
| 2001 | 2.84 | 2.92 | 2.07 | 2.00 | 3.37 |
| 2002 | 2.38 | 2.42 | 2.18 | 1.55 | 3.17 |
| 2003 | 2.35 | 2.37 | 2.16 | 2.04 | 2.85 |
| 2004 | 2.37 | 2.35 | 2.14 | 2.29 | 2.97 |
| 2005 | 2.32 | 2.28 | 2.05 | 2.24 | 3.05 |
| 2006 | 2.30 | 2.18 | 2.18 | 2.50 | 3.32 |
| 2007 | 2.12 | 1.94 | 1.91 | 2.45 | 3.27 |
| 2008 | 1.99 | 1.71 | 1.82 | 2.56 | 3.24 |
| 2009 | 1.87 | 1.64 | 1.85 | 2.32 | 3.04 |
| 2010 | 1.78 | 1.61 | 1.88 | 2.16 | 2.52 |
| 2011 | 1.86 | 1.70 | 1.94 | 2.23 | 2.69 |
| 2012 | 1.77 | 1.59 | 1.91 | 2.24 | 2.50 |
| 2013 | 1.75 | 1.57 | 1.89 | 2.30 | 2.35 |

**Table 2: Bank group-wise trends in Ratio of Operating Expenses to Average Business**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 2.09 | 2.07 | 2.26 | - | 2.14 |
| 1993 | 2.27 | 2.23 | 2.29 | - | 2.93 |
| 1994 | 2.31 | 2.30 | 2.13 | - | 2.57 |
| 1995 | 2.51 | 2.54 | 2.08 | 1.03 | 2.56 |
| 1996 | 2.66 | 2.69 | 2.16 | 2.26 | 2.76 |
| 1997 | 2.51 | 2.53 | 2.06 | 2.04 | 2.87 |
| 1998 | 2.35 | 2.36 | 1.92 | 1.75 | 2.83 |
| 1999 | 2.39 | 2.37 | 1.86 | 1.76 | 3.46 |
| 2000 | 2.22 | 2.22 | 1.80 | 1.53 | 3.20 |
| 2001 | 2.34 | 2.37 | 1.59 | 1.69 | 3.32 |
| 2002 | 1.97 | 1.94 | 1.66 | 1.52 | 3.15 |
| 2003 | 1.93 | 1.88 | 1.63 | 2.01 | 2.77 |
| 2004 | 1.92 | 1.86 | 1.60 | 2.07 | 2.87 |
| 2005 | 1.85 | 1.78 | 1.51 | 1.93 | 2.93 |
| 2006 | 1.78 | 1.65 | 1.55 | 2.04 | 3.14 |
| 2007 | 1.59 | 1.40 | 1.33 | 1.96 | 3.17 |
| 2008 | 1.48 | 1.21 | 1.27 | 2.06 | 3.29 |
| 2009 | 1.39 | 1.15 | 1.30 | 1.88 | 3.36 |
| 2010 | 1.31 | 1.12 | 1.32 | 1.76 | 2.87 |
| 2011 | 1.36 | 1.18 | 1.34 | 1.82 | 3.01 |
| 2012 | 1.28 | 1.09 | 1.31 | 1.82 | 2.86 |
| 2013 | 1.26 | 1.07 | 1.30 | 1.88 | 2.68 |

* Based on balance sheet figures, Average Assets is computed as mid-point of two year end figures of total assets. Average Business is the mid point of sum of deposits and advances for two year ends.

PSB – Public Sector Banks

**Table 3: Bank group-wise trends in Ratio of Operating Expenses to Net Income**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 55.58 | 58.72 | 59.05 | | 30.91 |
| 1993 | 72.46 | 74.38 | 66.75 | | 59.15 |
| 1994 | 68.10 | 73.08 | 57.33 | | 41.22 |
| 1995 | 63.41 | 67.57 | 52.09 | 40.27 | 40.64 |
| 1996 | 63.29 | 66.66 | 54.62 | 39.57 | 45.79 |
| 1997 | 61.00 | 64.31 | 56.25 | 39.88 | 45.72 |
| 1998 | 58.87 | 62.72 | 54.31 | 37.91 | 43.14 |
| 1999 | 64.30 | 65.94 | 64.78 | 49.73 | 57.08 |
| 2000 | 59.86 | 63.23 | 54.43 | 40.72 | 48.45 |
| 2001 | 63.38 | 67.01 | 53.17 | 50.26 | 50.04 |
| 2002 | 53.05 | 54.93 | 43.42 | 47.81 | 49.13 |
| 2003 | 48.36 | 49.30 | 42.74 | 46.39 | 46.57 |
| 2004 | 45.25 | 45.05 | 42.62 | 50.14 | 42.93 |
| 2005 | 49.56 | 48.87 | 53.80 | 52.70 | 49.11 |
| 2006 | 52.12 | 52.11 | 57.78 | 54.37 | 46.79 |
| 2007 | 50.13 | 50.35 | 49.55 | 53.63 | 44.60 |
| 2008 | 48.04 | 48.12 | 47.30 | 52.14 | 42.43 |
| 2009 | 44.68 | 45.45 | 45.08 | 47.91 | 37.96 |
| 2010 | 44.98 | 46.23 | 49.26 | 42.72 | 40.51 |
| 2011 | 45.23 | 45.35 | 48.45 | 45.02 | 43.52 |
| 2012 | 44.19 | 43.67 | 48.56 | 46.04 | 42.29 |
| 2013 | 45.02 | 45.51 | 47.78 | 44.89 | 40.88 |

**Table 4: Bank group-wise trends in Ratio of Staff Expenses to Average Total Assets**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 1.75 | 1.81 | 2.11 | | 0.75 |
| 1993 | 1.88 | 1.97 | 2.11 | | 0.75 |
| 1994 | 1.82 | 1.90 | 1.87 | | 0.87 |
| 1995 | 1.98 | 2.10 | 1.79 | 0.09 | 0.95 |
| 1996 | 2.20 | 2.36 | 1.84 | 0.41 | 1.09 |
| 1997 | 2.04 | 2.19 | 1.65 | 0.47 | 1.14 |
| 1998 | 1.92 | 2.10 | 1.51 | 0.43 | 1.02 |
| 1999 | 1.91 | 2.09 | 1.48 | 0.41 | 1.09 |
| 2000 | 1.79 | 1.97 | 1.50 | 0.38 | 1.08 |
| 2001 | 1.93 | 2.18 | 1.30 | 0.38 | 1.07 |
| 2002 | 1.54 | 1.75 | 1.35 | 0.36 | 1.05 |
| 2003 | 1.46 | 1.68 | 1.32 | 0.46 | 0.91 |
| 2004 | 1.43 | 1.63 | 1.26 | 0.53 | 0.95 |
| 2005 | 1.36 | 1.55 | 1.15 | 0.55 | 0.94 |
| 2006 | 1.30 | 1.45 | 1.25 | 0.65 | 1.14 |
| 2007 | 1.16 | 1.25 | 1.09 | 0.71 | 1.30 |
| 2008 | 1.03 | 1.05 | 1.02 | 0.80 | 1.31 |
| 2009 | 1.00 | 1.02 | 1.04 | 0.82 | 1.21 |
| 2010 | 0.98 | 1.00 | 1.09 | 0.80 | 1.07 |
| 2011 | 1.10 | 1.13 | 1.18 | 0.90 | 1.16 |
| 2012 | 1.01 | 1.01 | 1.10 | 0.92 | 1.06 |
| 2013 | 0.98 | 0.99 | 1.07 | 0.90 | 1.00 |

Table 5: Bank group-wise trends in Ratio of Staff Expenses to Average Business

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 1.40 | 1.44 | 1.61 | | 0.71 |
| 1993 | 1.52 | 1.57 | 1.61 | | 0.73 |
| 1994 | 1.50 | 1.56 | 1.42 | | 0.82 |
| 1995 | 1.66 | 1.76 | 1.37 | 0.14 | 0.84 |
| 1996 | 1.85 | 1.98 | 1.41 | 0.43 | 0.97 |
| 1997 | 1.70 | 1.83 | 1.26 | 0.38 | 1.01 |
| 1998 | 1.58 | 1.73 | 1.15 | 0.34 | 0.91 |
| 1999 | 1.58 | 1.72 | 1.14 | 0.34 | 1.03 |
| 2000 | 1.49 | 1.62 | 1.16 | 0.32 | 1.07 |
| 2001 | 1.59 | 1.77 | 1.00 | 0.32 | 1.06 |
| 2002 | 1.27 | 1.40 | 1.03 | 0.35 | 1.04 |
| 2003 | 1.20 | 1.33 | 1.00 | 0.45 | 0.89 |
| 2004 | 1.16 | 1.29 | 0.94 | 0.48 | 0.92 |
| 2005 | 1.09 | 1.21 | 0.84 | 0.47 | 0.90 |
| 2006 | 1.00 | 1.09 | 0.89 | 0.53 | 1.08 |
| 2007 | 0.86 | 0.90 | 0.76 | 0.57 | 1.26 |
| 2008 | 0.76 | 0.75 | 0.71 | 0.64 | 1.33 |
| 2009 | 0.75 | 0.72 | 0.74 | 0.66 | 1.33 |
| 2010 | 0.72 | 0.70 | 0.77 | 0.65 | 1.21 |
| 2011 | 0.80 | 0.78 | 0.82 | 0.73 | 1.29 |
| 2012 | 0.73 | 0.69 | 0.76 | 0.75 | 1.21 |
| 2013 | 0.70 | 0.67 | 0.73 | 0.73 | 1.13 |

Table 6: Bank group-wise trends in Ratio of Staff Expenses per Employee

(in ₹ 000s)

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 65.45 | 64.62 | 59.74 | | 142.36 |
| 1993 | 74.32 | 73.52 | 65.94 | | 158.91 |
| 1994 | 80.38 | 78.82 | 72.83 | | 210.86 |
| 1995 | 98.05 | 96.27 | 91.41 | 34.81 | 249.38 |
| 1996 | 127.11 | 124.79 | 112.54 | 114.66 | 335.22 |
| 1997 | 134.14 | 130.46 | 120.02 | 141.71 | 420.68 |
| 1998 | 145.64 | 141.69 | 133.02 | 185.52 | 422.24 |
| 1999 | 173.05 | 168.24 | 153.89 | 216.03 | 514.49 |
| 2000 | 193.64 | 187.30 | 181.20 | 234.44 | 620.61 |
| 2001 | 268.30 | 267.71 | 181.65 | 200.96 | 718.69 |
| 2002 | 259.29 | 251.65 | 211.81 | 289.92 | 866.20 |
| 2003 | 279.60 | 271.44 | 240.32 | 346.09 | 763.03 |
| 2004 | 307.97 | 298.43 | 267.11 | 363.28 | 823.04 |
| 2005 | 341.62 | 334.55 | 280.05 | 363.45 | 784.07 |
| 2006 | 382.67 | 369.26 | 340.28 | 391.59 | 924.00 |
| 2007 | 408.38 | 382.90 | 347.94 | 432.79 | 1125.66 |
| 2008 | 439.81 | 402.37 | 369.39 | 453.09 | 1419.27 |
| 2009 | 510.90 | 472.01 | 431.94 | 505.54 | 1635.94 |
| 2010 | 583.60 | 559.45 | 488.90 | 526.51 | 1685.09 |
| 2011 | 727.42 | 731.39 | 612.09 | 546.07 | 1928.32 |
| 2012 | 746.43 | 747.78 | 600.16 | 594.46 | 2090.13 |
| 2013 | 799.45 | 805.08 | 656.69 | 627.06 | 2410.31 |

**Table 7: Bank group-wise trends in Ratio of Other Operating Expenses to Average Total Assets**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 0.85 | 0.80 | 0.86 | | 1.51 |
| 1993 | 0.94 | 0.82 | 0.90 | | 2.26 |
| 1994 | 0.98 | 0.91 | 0.93 | | 1.87 |
| 1995 | 1.02 | 0.94 | 0.92 | 0.55 | 1.95 |
| 1996 | 0.96 | 0.85 | 0.98 | 1.74 | 2.02 |
| 1997 | 0.97 | 0.83 | 1.06 | 2.09 | 2.11 |
| 1998 | 0.93 | 0.77 | 1.02 | 1.79 | 2.17 |
| 1999 | 0.98 | 0.79 | 0.93 | 1.72 | 2.55 |
| 2000 | 0.88 | 0.73 | 0.82 | 1.42 | 2.16 |
| 2001 | 0.91 | 0.73 | 0.77 | 1.62 | 2.30 |
| 2002 | 0.84 | 0.67 | 0.83 | 1.19 | 2.12 |
| 2003 | 0.89 | 0.69 | 0.84 | 1.59 | 1.94 |
| 2004 | 0.94 | 0.72 | 0.88 | 1.75 | 2.02 |
| 2005 | 0.95 | 0.73 | 0.91 | 1.69 | 2.11 |
| 2006 | 1.00 | 0.74 | 0.93 | 1.85 | 2.18 |
| 2007 | 0.97 | 0.69 | 0.82 | 1.74 | 1.97 |
| 2008 | 0.96 | 0.66 | 0.81 | 1.76 | 1.93 |
| 2009 | 0.87 | 0.62 | 0.80 | 1.50 | 1.83 |
| 2010 | 0.79 | 0.61 | 0.79 | 1.36 | 1.45 |
| 2011 | 0.76 | 0.58 | 0.76 | 1.33 | 1.53 |
| 2012 | 0.76 | 0.58 | 0.81 | 1.32 | 1.44 |
| 2013 | 0.77 | 0.58 | 0.82 | 1.40 | 1.35 |

**Table 8: Bank group-wise trends in Ratio of Other Operating Expenses to Average Business**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 0.68 | 0.63 | 0.66 | | 1.43 |
| 1993 | 0.76 | 0.66 | 0.68 | | 2.20 |
| 1994 | 0.81 | 0.74 | 0.71 | | 1.75 |
| 1995 | 0.85 | 0.79 | 0.71 | 0.88 | 1.72 |
| 1996 | 0.81 | 0.71 | 0.75 | 1.82 | 1.79 |
| 1997 | 0.81 | 0.69 | 0.81 | 1.66 | 1.86 |
| 1998 | 0.77 | 0.64 | 0.77 | 1.41 | 1.93 |
| 1999 | 0.81 | 0.65 | 0.72 | 1.42 | 2.43 |
| 2000 | 0.73 | 0.60 | 0.64 | 1.20 | 2.13 |
| 2001 | 0.75 | 0.60 | 0.59 | 1.36 | 2.27 |
| 2002 | 0.69 | 0.54 | 0.63 | 1.17 | 2.11 |
| 2003 | 0.73 | 0.55 | 0.63 | 1.56 | 1.89 |
| 2004 | 0.76 | 0.57 | 0.66 | 1.58 | 1.95 |
| 2005 | 0.76 | 0.57 | 0.67 | 1.46 | 2.02 |
| 2006 | 0.77 | 0.56 | 0.66 | 1.51 | 2.06 |
| 2007 | 0.72 | 0.50 | 0.57 | 1.39 | 1.91 |
| 2008 | 0.71 | 0.47 | 0.56 | 1.42 | 1.96 |
| 2009 | 0.65 | 0.44 | 0.57 | 1.21 | 2.03 |
| 2010 | 0.59 | 0.42 | 0.56 | 1.11 | 1.65 |
| 2011 | 0.56 | 0.40 | 0.53 | 1.08 | 1.72 |
| 2012 | 0.55 | 0.40 | 0.56 | 1.07 | 1.65 |
| 2013 | 0.56 | 0.39 | 0.57 | 1.14 | 1.54 |

**Table 9: Bank group-wise trends in Ratio of Gross Income to Average Total Assets**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 4.68 | 4.44 | 5.04 | | 7.30 |
| 1993 | 3.89 | 3.75 | 4.51 | | 5.08 |
| 1994 | 4.11 | 3.84 | 4.88 | | 6.64 |
| 1995 | 4.72 | 4.49 | 5.21 | 1.60 | 7.14 |
| 1996 | 4.99 | 4.81 | 5.15 | 5.44 | 6.80 |
| 1997 | 4.93 | 4.69 | 4.83 | 6.43 | 7.11 |
| 1998 | 4.84 | 4.57 | 4.66 | 5.85 | 7.38 |
| 1999 | 4.48 | 4.37 | 3.73 | 4.28 | 6.37 |
| 2000 | 4.47 | 4.28 | 4.27 | 4.42 | 6.70 |
| 2001 | 4.48 | 4.35 | 3.90 | 3.98 | 6.73 |
| 2002 | 4.49 | 4.40 | 5.03 | 3.25 | 6.46 |
| 2003 | 4.86 | 4.80 | 5.05 | 4.40 | 6.11 |
| 2004 | 5.24 | 5.21 | 5.03 | 4.56 | 6.92 |
| 2005 | 4.67 | 4.67 | 3.82 | 4.25 | 6.20 |
| 2006 | 4.42 | 4.18 | 3.77 | 4.60 | 7.09 |
| 2007 | 4.24 | 3.86 | 3.86 | 4.58 | 7.33 |
| 2008 | 4.13 | 3.55 | 3.85 | 4.91 | 7.64 |
| 2009 | 4.19 | 3.60 | 4.09 | 4.83 | 8.01 |
| 2010 | 3.95 | 3.48 | 3.82 | 5.06 | 6.22 |
| 2011 | 4.12 | 3.76 | 4.00 | 4.96 | 6.19 |
| 2012 | 4.01 | 3.65 | 3.94 | 4.87 | 5.91 |
| 2013 | 3.89 | 3.44 | 3.96 | 5.12 | 5.75 |

**Table 10: Bank group-wise trends in Ratio of Operating Profit to Average Total Assets**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 2.08 | 1.83 | 2.06 | | 5.04 |
| 1993 | 1.07 | 0.96 | 1.50 | | 2.08 |
| 1994 | 1.31 | 1.03 | 2.08 | | 3.91 |
| 1995 | 1.73 | 1.46 | 2.49 | 0.96 | 4.24 |
| 1996 | 1.83 | 1.60 | 2.34 | 3.28 | 3.68 |
| 1997 | 1.92 | 1.68 | 2.11 | 3.86 | 3.86 |
| 1998 | 1.99 | 1.70 | 2.13 | 3.63 | 4.20 |
| 1999 | 1.60 | 1.49 | 1.31 | 2.15 | 2.73 |
| 2000 | 1.79 | 1.57 | 1.95 | 2.62 | 3.45 |
| 2001 | 1.64 | 1.44 | 1.83 | 1.98 | 3.36 |
| 2002 | 2.11 | 1.98 | 2.84 | 1.70 | 3.28 |
| 2003 | 2.51 | 2.43 | 2.89 | 2.36 | 3.26 |
| 2004 | 2.87 | 2.86 | 2.89 | 2.27 | 3.95 |
| 2005 | 2.36 | 2.39 | 1.76 | 2.01 | 3.16 |
| 2006 | 2.12 | 2.00 | 1.59 | 2.10 | 3.77 |
| 2007 | 2.11 | 1.91 | 1.95 | 2.12 | 4.06 |
| 2008 | 2.15 | 1.84 | 2.03 | 2.35 | 4.40 |
| 2009 | 2.32 | 1.96 | 2.25 | 2.52 | 4.97 |
| 2010 | 2.17 | 1.87 | 1.94 | 2.90 | 3.70 |
| 2011 | 2.26 | 2.05 | 2.06 | 2.73 | 3.49 |
| 2012 | 2.24 | 2.05 | 2.03 | 2.63 | 3.41 |
| 2013 | 2.14 | 1.88 | 2.07 | 2.82 | 3.40 |

**Table 11: Bank group-wise trends in Ratio of Net Profit to Average Total Assets**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992 | 0.37 | 0.27 | 0.57 | | 1.56 |
| 1993 | -1.14 | -1.06 | 0.38 | | -3.01 |
| 1994 | -0.89 | -1.22 | 0.65 | | 1.78 |
| 1995 | 0.47 | 0.27 | 1.34 | 0.68 | 1.96 |
| 1996 | 0.17 | -0.08 | 1.07 | 2.23 | 1.74 |
| 1997 | 0.70 | 0.59 | 0.98 | 2.31 | 1.29 |
| 1998 | 0.88 | 0.83 | 0.87 | 1.97 | 1.04 |
| 1999 | 0.53 | 0.46 | 0.52 | 1.24 | 0.98 |
| 2000 | 0.72 | 0.62 | 0.89 | 1.20 | 1.30 |
| 2001 | 0.54 | 0.45 | 0.64 | 0.92 | 1.10 |
| 2002 | 0.82 | 0.76 | 1.14 | 0.62 | 1.40 |
| 2003 | 1.05 | 1.01 | 1.26 | 0.92 | 1.59 |
| 2004 | 1.20 | 1.20 | 1.31 | 0.92 | 1.62 |
| 2005 | 0.97 | 0.95 | 0.34 | 1.15 | 1.37 |
| 2006 | 0.96 | 0.87 | 0.61 | 1.15 | 1.74 |
| 2007 | 1.00 | 0.90 | 0.72 | 1.06 | 1.94 |
| 2008 | 1.10 | 0.97 | 1.11 | 1.13 | 2.07 |
| 2009 | 1.10 | 1.01 | 1.13 | 1.10 | 1.86 |
| 2010 | 1.01 | 0.96 | 0.92 | 1.29 | 1.08 |
| 2011 | 1.06 | 0.92 | 1.07 | 1.48 | 1.65 |
| 2012 | 1.05 | 0.87 | 1.15 | 1.57 | 1.74 |
| 2013 | 1.02 | 0.78 | 1.21 | 1.69 | 1.92 |

**Table 12: Bank group-wise trends in CAGR (%)**

| | Operating Exp | Staff Exp. | Other Oper. Exp. | NII | Operating Profit |
|---|---|---|---|---|---|
| All Banks | 14.65 | 13.63 | 16.30 | 15.90 | 16.99 |
| PSBs | 12.96 | 12.43 | 14.00 | 14.49 | 15.86 |
| Old Pvt. Bks | 14.83 | 13.58 | 17.09 | 15.64 | 17.35 |
| New Pvt. Bks | 44.00 | 52.46 | 41.27 | 42.57 | 42.49 |
| Foreign Bks | 16.64 | 18.03 | 15.82 | 16.40 | 14.25 |

**Table 13*: Bank group-wise trends in Ratio of Average Operating Expenses to Average Total Assets (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 2.82 | 2.83 | 2.84 | | 2.75 |
| 1995-2001 | 2.88 | 2.92 | 2.43 | 1.98 | 3.29 |
| 2001-2007 | 2.33 | 2.28 | 2.09 | 2.28 | 3.16 |
| 2007-2013 | 1.84 | 1.65 | 1.89 | 2.30 | 2.71 |

**Table 14: Bank group-wise trends in Ratio of Average Operating Expenses to Average Business (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 2.31 | 2.30 | 2.17 | | 2.56 |
| 1995-2001 | 2.39 | 2.41 | 1.87 | 1.69 | 3.07 |
| 2001-2007 | 1.84 | 1.76 | 1.53 | 1.95 | 3.06 |
| 2007-2013 | 1.35 | 1.15 | 1.31 | 1.87 | 2.99 |

**Table 15: Bank group-wise trends in Ratio of Average Operating Expenses to Average Net Income (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 64.59 | 68.24 | 57.51 | | 41.90 |
| 1995-2001 | 61.96 | 47.63 | 55.70 | 44.60 | 48.03 |
| 2001-2007 | 50.85 | 35.40 | 48.91 | 51.96 | 46.55 |
| 2007-2013 | 45.56 | 29.09 | 48.00 | 46.58 | 41.49 |

* Average computed for the respective time period for various parameters.

**Table 16: Bank group-wise trends in Ratio of Average Staff Expenses to Average Total Assets (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 1.87 | 1.95 | 1.94 | | 0.84 |
| 1995-2001 | 1.94 | 2.13 | 1.53 | 0.39 | 1.07 |
| 2001-2007 | 1.39 | 1.57 | 1.23 | 0.58 | 1.08 |
| 2007-2013 | 1.02 | 1.05 | 1.09 | 0.85 | 1.13 |

**Table 17: Bank group-wise trends in Ratio of Average Staff Expenses to Average Business (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 1.53 | 1.59 | 1.48 | | 0.78 |
| 1995-2001 | 1.61 | 1.76 | 1.17 | 0.33 | 1.00 |
| 2001-2007 | 1.10 | 1.21 | 0.90 | 0.50 | 1.05 |
| 2007-2013 | 0.75 | 0.73 | 0.76 | 0.69 | 1.24 |

**Table 18: Bank group-wise trends in Ratio of Average Staff Expenses to Average Net Income (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 42.74 | 47.17 | 39.13 | | 12.82 |
| 1995-2001 | 41.77 | 47.63 | 34.95 | 8.70 | 15.63 |
| 2001-2007 | 30.34 | 35.40 | 28.74 | 13.27 | 15.95 |
| 2007-2013 | 25.35 | 29.09 | 27.66 | 17.29 | 17.25 |

**Table 19: Bank group-wise trends in Ratio of Average Staff Expenses to Average No. of Employees (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 79.79 | 78.52 | 72.67 | | 191.07 |
| 1995-2001 | 161.28 | 157.49 | 139.83 | 188.29 | 469.15 |
| 2001-2007 | 321.90 | 310.04 | 265.12 | 376.54 | 889.77 |
| 2007-2013 | 612.27 | 591.13 | 513.01 | 543.72 | 1743.59 |

**Table 20: Bank group-wise trends in Ratio of Average Other Operating Expenses to Average Total Assets (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| 1992-1995 | 0.95 | 0.87 | 0.91 | | 1.91 |
| 1995-2001 | 0.94 | 0.79 | 0.91 | 1.60 | 2.22 |
| 2001-2007 | 0.94 | 0.71 | 0.86 | 1.70 | 2.08 |
| 2007-2013 | 0.82 | 0.60 | 0.80 | 1.45 | 1.59 |

**Table 21: Bank group-wise trends in Ratio of Average Other Operating Expenses to Average Business (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| **1992-1995** | 0.78 | 0.71 | 0.69 | | 1.78 |
| **1995-2001** | 0.78 | 0.65 | 0.70 | 1.36 | 2.07 |
| **2001-2007** | 0.74 | 0.55 | 0.63 | 1.45 | 2.01 |
| **2007-2013** | 0.60 | 0.42 | 0.56 | 1.17 | 1.75 |

**Table 22: Bank group-wise trends in Ratio of Average Other Operating Expenses to Average Net Income (%)**

| Year | All Banks | PSBs | Old Pvt. Sector Banks | New Pvt. Sector Banks | Foreign Banks |
|---|---|---|---|---|---|
| **1992-1995** | 21.86 | 21.07 | 18.38 | | 29.08 |
| **1995-2001** | 20.19 | 17.65 | 20.75 | 35.90 | 32.40 |
| **2001-2007** | 20.51 | 16.04 | 20.17 | 38.69 | 30.60 |
| **2007-2013** | 20.21 | 16.76 | 20.34 | 29.29 | 24.24 |